

# Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

## 8312 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232 Applications



For more Information  
please call

1-800-Belden1



### General Description:

22 AWG stranded (7x30) tinned copper conductors, semi-rigid PVC insulation, twisted pairs, overall Beldfoil® (100% coverage) + tinned copper braid shield (65% coverage), PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
1	12	22	7x30	TC - Tinned Copper

Total Number of Conductors: 25

#### Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
S-R PVC - Semi-Rigid Polyvinyl Chloride	0.279

#### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	65

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.016

#### Overall Cable

Overall Nominal Diameter: 11.557 mm

#### Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green
10	Red & Blue
11	Red & Yellow
12	Red & Brown
Single Conductor	Gray

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +80°C

UL Temperature Rating: 80°C (UL AWM Style 2464)

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**Bulk Cable Weight:** 191.978 Kg/Km

**Min. Bend Radius/Minor Axis:** 120.650 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

**NEC/(UL) Specification:** CMG

**CEC/C(UL) Specification:** CMG

**AWM Specification:** UL Style 2464 (300 V 80°C)

**EU Directive 2011/65/EU (ROHS II):** Yes

**EU CE Mark:** Yes

**EU Directive 2000/53/EC (ELV):** Yes

**EU Directive 2002/95/EC (RoHS):** Yes

**EU RoHS Compliance Date (mm/dd/yyyy):** 10/01/2005

**EU Directive 2002/96/EC (WEEE):** Yes

**EU Directive 2003/11/EC (BFR):** Yes

**CA Prop 65 (CJ for Wire & Cable):** Yes

**MII Order #39 (China RoHS):** Yes

#### Flame Test

**CSA Flame Test:** FT4

#### Plenum/Non-Plenum

**Plenum (Y/N):** No

### Electrical Characteristics (Overall)

#### Nom. Capacitance Conductor to Conductor:

**Capacitance (pF/m)**

114.835

#### Nom. Capacitance Cond. to Other Conductor & Shield:

**Capacitance (pF/m)**

206.703

#### Nominal Velocity of Propagation:

**VP (%)**

60

#### Nom. Conductor DC Resistance:

**DCR @ 20°C (Ohm/km)**

49.215

#### Nominal Outer Shield DC Resistance:

**DCR @ 20°C (Ohm/km)**

13.7802

#### Max. Operating Voltage - UL:

**Voltage**

300 V RMS

#### Max. Recommended Current:

**Current**

1.5 Amps per conductor @ 25°C

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8312 060100	30 MT	6.622 KG	CHROME	C	12 PR, 1#22 PVC SHLD PVC
8312 0601000	305 MT	67.132 KG	CHROME	C	12 PR, 1#22 PVC SHLD PVC

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8312 060500	152 MT	32.659 KG	CHROME	C	12 PR, 1#22 PVC SHLD PVC
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**Notes:**

C = CRATE REEL PUT-UP.

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